Remarks

Claims 22-31 are at issue. Claims 22-31 stand rejected under 35 USC § 103 (a), as being unpatentable over Naik et al. (5548647) in view of Higgins (5339385).

The Examiner has objected to the title of the invention. The applicants are happy to accept any reasonable suggestion for a new title.

Claim 22 requires comparing the test utterances to the training utterances to form a preliminary decision. This is a non-parametric process. A decision is a binary result - yes or no. This is not shown in the prior art. The Examiner points to Higgins, col. 4, lines 51-62. Higgins suggests a parametric measurement over the phrase. Where the claimed speaker's distance $d_{T,R}$ is compared to reference speakers distance $d_{T,E}$. This would defeat the whole purpose of the invention and teaches away from the invention. As stated in the specification pages 6-7, lines 24-26 & 1-7, not all utterances provide equal reliability. Thus is if the input phrase is "one", "three", "five". The prior art would parametrically add the "distance" to find $d_{T,R}$ and $d_{T,E}$. However, if the utterance "one" is twice as reliable an indicator as "five" the prior art does not account for this. In addition, the prior art does not make a decision (non-parametric) for "one", "three", "five" and then combine these preliminary decisions to form a final answer. Clearly claim 22 is allowable over the prior art.

Claim 23 requires weighting each preliminary decision. Clearly the prior art does not have preliminary decisions, so it does not weight the decisions. Claim 23 is allowable over the prior art.

Claim 24 depends from claim 23 and is allowable for the same reasons.

Claim 25 depends from claim 23 and is allowable for the same reasons.

Claim 26 requires separating speakers into male and female speakers. The Examiner states that Naik et al separate the speakers into male and female speakers. This is true, however, the claim also requires a "male variance vector". This is not shown in the prior art. Claim 26 is allowable over the prior art.

Claim 27 depends from claim 26 and is allowable for the same reasons.

Claim 28 depends from claim 27 and is allowable for the same reasons.

Claim 29 requires comparing the test utterances to the training utterances to form a preliminary decision. This is a non-parametric process. A decision is a binary result yes or no. This is not shown in the prior art. The Examiner points to Higgins, col. 4, lines 51-62. Higgins suggests a parametric measurement over the phrase. Where the claimed speaker's distance $d_{T,R}$ is compared to reference speakers distance $d_{T,E}$. This would defeat the whole purpose of the invention and teaches away from the invention. As stated in the specification pages 6-7, lines 24-26 & 1-7, not all utterances provide equal reliability. Thus is if the input phrase is "one", "three", "five". The prior art would parametrically add the "distance" to find $d_{T,R}$ and $d_{T,E}$. However, if the utterance "one" is twice as reliable an indicator as "five" the prior art does not account for this. In addition, the prior art does not make a decision (non-parametric) for "one", "three", "five" and then combine these preliminary decisions to form a final answer. Clearly claim 29 is allowable over the prior art. In addition claim 29 requires determining if a speaker is a male as part of the verification process. This is not shown in Naik et al.

Claim 30 requires forming preliminary decisions. This is a non-parametric process. A decision is a binary result yes or no. This is not shown in the prior art. The Examiner points to Higgins, col. 4, lines 51-62. Higgins suggests a parametric measurement over the phrase. Where the claimed speaker's distance $d_{T,R}$ is compared to reference speakers distance $d_{T,E}$. This would defeat the whole purpose of the invention and teaches away from the invention. As stated in the specification pages 6-7, lines 24-26 & 1-7, not all utterances provide equal reliability. Thus is if the input phrase is "one", "three", "five". The prior art would parametrically add the "distance" to find $d_{T,R}$ and $d_{T,E}$. However, if the utterance "one" is twice as reliable an indicator as "five" the prior art does not account for this. In addition, the prior art does not make a decision (non-parametric) for "one", "three", "five" and then combine these

preliminary decisions to form a final answer. Clearly claim 30 is allowable over the prior art.

Claim 31 requires comparing the test utterances to the training utterances to form a preliminary decision. This is a non-parametric process. A decision is a binary result yes or no. This is not shown in the prior art. The Examiner points to Higgins, col. 4, lines 51-62. Higgins suggests a parametric measurement over the phrase. Where the claimed speaker's distance $d_{T.R}$ is compared to reference speakers distance $d_{T.E}$. This would defeat the whole purpose of the invention and teaches away from the invention. As stated in the specification pages 6-7, lines 24-26 & 1-7, not all utterances provide equal reliability. Thus is if the input phrase is "one", "three", "five". The prior art would parametrically add the "distance" to find $d_{T.R}$ and $d_{T.E}$. However, if the utterance "one" is twice as reliable an indicator as "five" the prior art does not account for this. In addition, the prior art does not make a decision (non-parametric) for "one", "three", "five" and then combine these preliminary decisions to form a final answer. Clearly claim 31 is allowable over the prior art.

Prompt reconsideration and allowance of the application are respectfully requested.

Respectfully submitted,

(Bossemeyer, Jr. et al.)

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I hereby certify that a ___Response___ is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner of Patents and Trademarks, Washington, D.C. 20231, on:

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Date

[signature]
Signature (Dale B. Halling)